



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,665	12/20/1999	JAMES MOSER	9-13528-82US	1452
20988	7590	11/07/2003	EXAMINER	
OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			ODOM, CURTIS B	
			ART UNIT	PAPER NUMBER
			2634	
DATE MAILED: 11/07/2003				

5

Please find below and/or attached an Office communication concerning this application or proceeding.

AIR MAIL

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/466,665	MOSER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Curtis B. Odom	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 August 2003.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-31 is/are allowed.
- 6) Claim(s) 67 and 68 is/are rejected.
- 7) Claim(s) 32,35,36,38-66 and 69-78 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 December 1999 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 32, 35, 36, and 38-66 are objected to because of the following informalities: In claim 32, the phrase “first detecting means” is suggested to be changed to “digital frequency detector” and the phrase “second detecting means” is suggested to be changed to “phase detector”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 67 and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Huscroft et al. (U.S. Patent No. 5, 512, 860).

Regarding claim 67, Huscroft et al. discloses a method recovering a clock signal from a received data signal, comprising the steps of:

sampling (Fig. 1) the received data signal using a phase detector (Fig. 1, block 5, column 4, line 60-column 5, line 17) that generates a phase error signal indicative of a detected phase

difference between the data signal and an oscillator output signal, and a digital frequency detector (Fig. 1, 15, column 5, lines 31-59);

selecting (Fig. 1, block 19, column 5, lines 52-59 and column 7, lines 18-column 8, line 8) an output of the phase detector when the detected frequency difference is small and otherwise selecting the output of the digital frequency detector to generate the recovered clock signal; and using the selected one of the outputs of the phase detector and the digital frequency detector to control an oscillator to generate the recovered clock signal (column 5, 10-59).

Regarding claim 68, Huscroft et al. discloses a method as claimed in claim 67, wherein selecting an output of the phase detector and the digital frequency detector is performed by a control unit (Fig. 1, block 19, column 5, lines 52-59 and column 7, lines 18-column 8, line 8).

#### *Allowable Subject Matter*

4. Claims 1-32, 35, 36, and 38-66 are allowable over prior art if above rejections are overcome because related references do not disclose a digital frequency detector which includes a first and second sampler that produce outputs to a third sampler with determines a frequency error signal from the outputs of the first and second sampler.

5. Claims 69-78 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu et al. (U.S. Patent No. 6, 055, 286) discloses a sampler with in which the outputs of a first and second sampler are used to produce a frequency error signal.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 703-305-4097. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are 709-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Curtis Odom  
October 23, 2003



STEPHEN CHIN  
SUPERVISORY PATENT EXAMINEE  
TECHNOLOGY CENTER 2600